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EXAMINER
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2464

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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## DETAILED ACTION

### *Summary*

1. This is in response to an amendment/response filed on June 17<sup>th</sup>, 2010.
2. Claims 1, 21, 34, and 42 have been amended.
3. No claims have been presently cancelled.
4. Claims 44-46 have been added.
5. Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-46 are currently pending.

### *Claim Rejections - 35 USC § 112*

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 21, and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claims 1, 21, and 34 previously recited the limitation “monitor the second **non-VoIP** voice signals” (*emphasis added*). In the amendment filed on June 17<sup>th</sup>, 2010, the claims were amended to remove the monitor of non-VoIP voice signals as previously recited, and further recite the limitation “monitor the second **VoIP** voice signals.”

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It is noted that figures 1A, 1B, 2, and 3 of the Instant Application disclose an unauthorized call activity detection component 129 which operates in the analog portion of the network prior to packetization and compression by VoIP gateway 126. That is, contrary to the newly amended claims, the monitoring of unauthorized call activity is performed on **non-VoIP** voice signals. It is acknowledged that an additional unauthorized call activity detection component 329 may be implemented in the same housing and share a processor as VoIP gateway 186. However, pages 16-17 paragraph 52 of the Instant Application's specification recite, "Although sharing a system housing, and possibly a processor, for convenience, unauthorized call activity detection control block 329 of a preferred embodiment is coupled to the call flow at a point **beyond or outside of the VoIP network**. Accordingly, as discussed above with respect to unauthorized call activity detection control block 129, unauthorized call activity detection control block 329 of embodiments of the invention operates with respect to telephony signals have **not** been compressed and packetized by VoIP gateway 186 and/or which have been decompressed and depacketized by VoIP gateway 186." (*emphasis added*). The Instant Application does not specifically disclose monitoring the VoIP voice signals for unauthorized call activity as recited in the newly amended claims.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al. (U.S. Patent 7,203,186) in view of Mussman et al. (U.S. Patent 7,075,922) and Gainsboro (U.S. Patent 5,655,013).

**For claim 1**, Fuller et al. disclose a call processing system for processing calls associated with a facility, comprising:

a first processor-based system coupled to a plurality of telephone terminals disposed within the facility, the first processor-based system disposed at the facility (*see column 5 lines 4-*

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*56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 coupled to a plurality of telephone terminals 18 in facility 16),*

*the first processor-based system transmitting first voice signals associated with one or more of the plurality of telephone terminals (see column 5 lines 4-21 and figure 1, which recite processor-based system 17, 22, 24 that transmits voice signals associated with IP telephones 18 via Ethernet digital data link 20); and*

*a second processor-based system communicating with the first processor-based system via a digital data link and disposed remotely from the first processor-based system, the second processor-based system establishing calls to called parties requested by the one or more of the plurality of telephone terminals (see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 remotely coupled to processor-based system 17, 22, 24 to establish calls to called parties requested by IP telephones 18),*

*the second processor-based system converting the first voice signals for transmission over a carrier network responsive to receiving the first voice signals via the digital data link, the second processor-based system converting second non-VoIP (Voice over Internet Protocol) voice signals from the called parties received via the carrier network to second VoIP voice signals for transmission to the first processor-based system via the digital data link (see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12).*

Fuller et al. disclose the subject matter of the claimed invention with the exception that the second processor-based system monitors the second VoIP voice signals to detect fraudulent

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or unauthorized call activity in the calls. However, Mussman et al. from the same or similar fields of endeavor disclose a method and apparatus for screening unauthorized calls in a Voice over IP (VoIP) network (*see column 1 lines 37-46*). Unauthorized calls may be screened for calls made between in a PSTN switched network 1030 and a packet network 1040 (*see column 2 lines 31-60 and figures 1-2*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for screening unauthorized calls between a PSTN network and a VoIP network as taught by Mussman et al. with the combined analog and VoIP telephony call processing system as taught by Fuller et al. The method and apparatus for screening unauthorized calls can be implemented by using the gatekeeper that monitors calls between a PSTN network and a VoIP network as taught by Mussman et al. in the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. The motivation for using the method and apparatus for screening unauthorized calls between a PSTN network and a VoIP network as taught by Mussman et al. with the a call processing system as taught by Fuller et al. is to improve the security of the network by providing an access control mechanism for allowing or rejecting calls in the network.

Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals specifically comprises one or more prison facilities. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the network that facilitates and screens

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combined digital VoIP and analog POTS calls as taught by Fuller et al. and Mussman et al. The method and apparatus for managing telephone activity in prison facilities can be implemented by using the network that screens unauthorized calls as taught by Fuller et al. and Mussman et al. in prison facilities as suggested by Gainsboro. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the network that facilitates and screens combined digital VoIP and analog POTS calls as taught by Fuller et al. and Mussman et al. is to improve security in a prison system by allowing or rejecting calls made through the prison telephony network.

**For claim 2**, Fuller et al. a call processing system wherein the first voice signals and the second VoIP voice signals are transmitted between the first processor-based system and the second processor-based system via voice over Internet protocol data (*see column 10 lines 24-31*).

**For claim 3**, Fuller et al. a call processing system wherein the first processor-based system switches the calls based on control by the second processor-based system (*see column 10 lines 28-31, which recite a voice gateway 44 that controls which protocol is used to switch the call*).

**For claim 4**, Fuller et al. a call processing system wherein the second processor-based system performs call routing for the calls (*see column 10 lines 24-31, which recite the voice gateway 44 that routes calls to the destination telephone*).

**For claim 5**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system verifies personal identification number (PIN) of a caller placing a call by one of the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method



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and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*).

Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU further validates a call by verifying the PIN of a caller (*see column 1 lines 48-49 and column 6 lines 8-9*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 6**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system processes billing associated with placing a call using the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see*

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*column 4 lines 5-10 and figure 1).* The TMU processes billing information associated with the call (*see column 6 lines 9-20*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 7**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system comprises a call processing platform providing at least one of billing, validation and routing associated with the calls made via the first processor-based system. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU processes billing information associated with the call (*see column 6 lines 9-20*).

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Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 8**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing platform provides at least one of billing, validation and routing associated with calls made via a third processor-based system disposed at another prison facility. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*). The TMU further validates a call by verifying the PIN of a caller (*see column 1 lines 48-49 and column 6 lines 8-9*), determines whether a call is accepted by a called party (*see column 3 lines 39-52*), and processes billing information associated with the call (*see column 6 lines 9-20*).

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Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 9**, Fuller et al. a call processing system wherein the first processor-based system comprises a voice over Internet protocol gateway coupled between the plurality of telephone terminals and the digital data link (*see column 5 lines 4-56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 for processing H.323 VoIP traffic between a plurality of telephone terminals 18 and digital DSL link 34*).

**For claim 10**, Fuller et al. a call processing system wherein the second processor-based system comprises a network edge device coupled to the digital data link (*see figure 1, voice gateway 44 coupled to digital link 34 via DSLAM 40*).

**For claim 11**, Fuller et al. a call processing system wherein the network edge device comprises a gateway between the digital data network and the carrier network (*see figure 1,*

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*voice gateway 44 coupled between a digital link 34 via DSLAM 40 and carrier network PTSN 12).*

**For claim 12**, Fuller et al. a call processing system wherein the carrier network comprises a public switched telephone network (*see figure 1, voice gateway 44 and carrier network PTSN 12*).

**For claim 13**, Fuller et al. a call processing system wherein the network edge device comprises a voice over Internet protocol gateway (*see figure 1, which recite a voice gateway 44 that processes H.323 VoIP data*).

**For claim 14**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and

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apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 16**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor- based system provides performs speech recognition on the calls placed by the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the

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call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 19**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system performs call monitoring and call recording on the calls placed by the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the

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management and security in telephone communications of prison facilities by providing information for access control.

**For claim 21**, Fuller et al. disclose a facility call processing system comprising:

a call processing system communicating with a plurality of processor-based systems via digital data links, each processor-based system associated with a facility, the call processor system located remotely from at least one of the facility, the call processing platform being coupled to a carrier network for establishing calls from a plurality of telephone terminals in the facility (*see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 coupled to carrier network 12 to establish calls to called parties requested by IP telephones 18 at facility 16*),

the call processing platform receiving first voice signals from the facility via the digital data links and sending the first voice signals over a carrier network to called parties, the call processing platform receiving second non-VoIP (Voice over Internet Protocol) voice signals from the called parties via the carrier network and converting the second non-VoIP voice signals to second VoIP voice signals for transmission over the digital data links to the facility (*see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12*), and

call processing gateways associated with the facility to process the second VoIP voice signals for transmission to the plurality of telephone terminals, the call processing gateways generating the first voice signals responsive to receiving call signals from the plurality of telephone terminals (*see column 5 lines 4-56 and figure 1, which recite a processor-based system*



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*comprising computer 17, modem 22, and Call Forwarding Manager 24 coupled to a plurality of telephone terminals 18 in facility 16 to transmit and receive voice signals associated with IP telephones 18).*

Fuller et al. disclose the subject matter of the claimed invention with the exception that the second processor-based system monitors the second VoIP voice signals to detect fraudulent or unauthorized call activity in the calls. However, Mussman et al. from the same or similar fields of endeavor disclose a method and apparatus for screening unauthorized calls in a Voice over IP (VoIP) network (*see column 1 lines 37-46*). Unauthorized calls may be screened for calls made between in a PSTN switched network 1030 and a packet network 1040 (*see column 2 lines 31-60 and figures 1-2*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for screening unauthorized calls between a PSTN network and a VoIP network as taught by Mussman et al. with the combined analog and VoIP telephony call processing system as taught by Fuller et al. The method and apparatus for screening unauthorized calls can be implemented by using the gatekeeper that monitors calls between a PSTN network and a VoIP network as taught by Mussman et al. in the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. The motivation for using the method and apparatus for screening unauthorized calls between a PSTN network and a VoIP network as taught by Mussman et al. with the a call processing system as taught by Fuller et al. is to improve the security of the network by providing an access control mechanism for allowing or rejecting calls in the network.

Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals specifically

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comprises one or more prison facilities. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the network that facilitates and screens combined digital VoIP and analog POTS calls as taught by Fuller et al. and Mussman et al. The method and apparatus for managing telephone activity in prison facilities can be implemented by using the network that screens unauthorized calls as taught by Fuller et al. and Mussman et al. in prison facilities as suggested by Gainsboro. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the network that facilitates and screens combined digital VoIP and analog POTS calls as taught by Fuller et al. and Mussman et al. is to improve security in a prison system by allowing or rejecting calls made through the prison telephony network.

**For claim 22**, Fuller et al. disclose a call processing system wherein the digital data links provide voice over Internet protocol data communication between the plurality of prison facilities and the call processing platform (*see column 10 lines 24-31*).

**For claim 24**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk

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Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 30**, Fuller et al. a call processing system wherein the call processing gateways provide interfacing between at least one analog telephone line interface and the digital data links (*see column 5 lines 57-64*).

**For claim 31**, Fuller et al. a call processing system wherein the call processing gateways comprise voice over Internet protocol gateways (*see column 5 lines 4-56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 for processing H.323 VoIP traffic between a plurality of telephone terminals 18 and digital DSL link 34*).

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**For claim 32**, Fuller et al. a call processing system wherein the call processing gateways provide at least one local area network interface for coupling a computer workstation to the call processing platform via the digital data links (*see column 5 lines 41-47*).

**For claim 34**, Fuller et al. disclose a method for providing facility call processing, in a centralized call processing system, the method comprising:

Communicating with a plurality of processor-based systems via digital data links, each processor-based system collect call signals for establishing calls from telephone terminals in a facility, at least one of the processor-based system located remotely from the centralized call processing platform (*see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 coupled to carrier network 12 to establish calls to called parties requested by IP telephones 18 at facility 16*);

receiving a first voice signals collected by one of the plurality of processor-based systems via the digital data link; converting the first voice signals for transmission over a carrier network; receiving a second non-VoIP (Voice over Internet Protocol) second voice signal from the called party via the carrier network; converting the second non-VoIP voice signal to a second VoIP voice signal for transmission over the digital data link to the one of the plurality processor-based systems (*see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12*).

Fuller et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals comprises one ore more prison facilities and the second non-VoIP voice signals are monitored to detect fraudulent or

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unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller et al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities (*see column 3 lines 11-15*).

**For claim 36**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity

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comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 38**, Fuller et al. disclose a call processing method wherein the method includes routing the call to the called party (*see column 10 lines 24-31, which recite the voice gateway 44 that routes calls to the destination telephone*). Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system further comprises validating an the call from the one of a plurality of telephone terminals, determining acceptance of the call by the called party, the call established responsive to the

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acceptance of the call by the called party; and creating call billing information associated with the call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity such as three-way calling (*see column 4 lines 34-41*). The TMU further validates a call by verifying the PIN of a caller (*see column 1 lines 48-49 and column 6 lines 8-9*), determines whether a call is accepted by a called party (*see column 3 lines 39-52*), and processes billing information associated with the call (*see column 6 lines 9-20*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 39**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further

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performs speech recognition on the call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 40**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further records the call. However, Gainsboro from the same or similar fields of endeavor disclose a



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method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 41**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system discontinues the calls responsive to detecting the fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate

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telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 42**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system discontinues the calls responsive to detecting the fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see*

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*column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

**For claim 43**, Fuller et al. and Mussman et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further comprises discontinuing the call responsive to detecting the fraudulent or unauthorized call activity. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility (*see column 3 lines 11-15*). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) (*see column 4 lines 5-10 and figure 1*). The TMU monitors fraudulent or unauthorized

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call activity using speech recognition (*see column 5 lines 17-29*), call recording (*see column 4 lines 31-32*), and billing processing (*see column 6 lines 9-20*). If unauthorized activity is detected, the call may be discontinued (*see column 6 lines 36-40*).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The method and apparatus for monitoring call activity can be implemented by using the Trunk Management Unit as taught by Gainsboro to process calls made using the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. and Mussman et al. is to improve the management and security in telephone communications of prison facilities by providing information for access control.

12. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al. (U.S. Patent 7,203,186) in view of Mussman et al. (U.S. Patent 7,075,922) and Gainsboro (U.S. Patent 5,655,013), and further in view of Arimilli et al. (U.S. Patent 5,682,386).

**For claims 44-46**, Fuller et al., Mussman et al., and Gainsboro disclose a network that facilitates and screens combined digital VoIP and analog POTS calls. However, Fuller et al., Mussman et al., and Gainsboro does not specifically disclose applying silence detection techniques to the second VoIP voice signals. Arimilli et al. from the same or similar fields of

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endeavor disclose a method and apparatus for processing voice communications in a data stream that uses a silence detection function (*see column 11 lines 65-67 and column 12 lines 1-5*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the silence detection function as taught by Arimilli et al. with the network that facilitates and screens combined digital VoIP and analog POTS calls as taught by Fuller et al., Mussman et al., and Gainsboro. The method and apparatus for silence detection activity can be implemented by configuring the network that facilitates combined analog and VoIP telephony as taught by Fuller et al. and Mussman et al. to use the silence detection function as taught by Arimilli et al. The motivation for using the method and apparatus for using the silence detection function as suggested by Arimilli et al. with the network that facilitates and screens combined digital VoIP and analog POTS calls is to improve the efficiency of the network by eliminating the transmission of silent packets to conserve bandwidth.

### ***Response to Arguments***

13. It is noted with appreciation that the Applicants' has carefully considered the previous Office Action and the cited prior art references. Applicant's arguments with respect to the prior art rejections of the pending claims have been considered but are moot in view of the new ground(s) of rejection. Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-43 are currently rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al. (U.S. Patent 7,203,186) in view of Mussman et al. (U.S. Patent 7,075,922) and Gainsboro (U.S. Patent 5,655,013). Newly added claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller

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et al. (U.S. Patent 7,203,186) in view of Mussman et al. (U.S. Patent 7,075,922) and Gainsboro (U.S. Patent 5,655,013), and further in view of Arimilli et al. (U.S. Patent 5,682,386).

14. While the 35 U.S.C. 103(a) rejection of Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-43 has been updated to further incorporate Mussman et al. (U.S. Patent 7,075,922), the Examiner's response to the Applicants' arguments regarding to combination of Fuller et al. and Gainsboro is additionally provided for the Applicants' consideration.

Specifically, on page 11 of the Applicants' remarks filed on June 17<sup>th</sup>, 2010, the Applicants argue:

Fuller uses VoIP technology based on digital technology to service multiple telephones. **For this purpose, Fuller uses various digital call processing components such as voice gateway 44, DSLAM 40, and ADSL modem 22.** In contrast, Gainsboro is based on analog/POTS system to service multiple telephones. For this purpose, Gainsboro uses analog call processing components such as TMU. Because Fuller and Gainsboro are based on different call processing system, the principle of operation of Fuller and/or Gainsboro must be modified for combination (*emphasis added*).

However, the Examiner respectfully disagrees with the Applicants' characterization of Fuller. Fuller discloses, "a telephone network architecture for **combined VoIP, data, and analog POTS** telephony (*see column 5 lines 4-7*)."  
Contrary to the Applicants' assertion, Fuller uses both digital as well as analog components in the network. Specifically, Fuller discloses a facility 16 that provides service for digital IP telephones 18 as well as analog POTS telephones 23 (*see figure 1*). Further, the facility 16 disclosed by Fuller connects to a digital network 14 as well as an analog network 12. Rather than being limited to digital call processing components as asserted by the Applicants, network 10 provides combined VoIP, data, and analog POTS telephony. In order to provide combined VoIP, data, and analog POTS telephony, network 10

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must be compatible with both digital as well as analog components. Thus network 10 as disclosed by Fuller is able to utilize the analog/POTS system as disclosed by Gainsboro.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit  
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